

REMARKS

This Amendment is filed in response to the Final Office Action mailed on June 26, 2008, and is herewith filed a Request for Continuing Examination. All objections and rejections are respectfully traversed.

Claims 1-58 are currently pending.

Claims 56-58 are currently added.

Request for Interview

Applicant respectfully requests a telephonic interview with the Examiner after the Examiner has had an opportunity to consider this Amendment, but before the issuance of the next Office Action. The Applicant may be reached at 617-951-3067.

Claim Rejections – 35 USC § 112

At paragraphs 3-4 of the Office Action, claim 52 was rejected under 35 U.S.C. §112, second paragraph as being indefinite. Specifically, the examiner objected to the term “conventional.”

Applicant has cancelled the term, and therefore, the rejection is moot.

Claim Rejections – 35 USC § 103

At paragraphs 5-6 of the Office Action, claims 1-4, 6-36, and 38-55 were rejected under 35 U.S.C. §103 as being unpatentable over Blumenau et al., US Patent 6,421,711,

hereinafter Blumenau, in view of “A Guide to Understanding Veritas Volume Replicator,” hereinafter VVR.

The present invention, as set forth in representative claim 1, comprises in part:

1. A system configured to simplify management of a clustered storage system having a plurality of failover modes, the system comprising:
 - a user interface system that defines a plurality of failover modes, wherein each failover mode automatically configures one or more ports on a selected storage system or a partner storage system in response to a failover condition; and
 - a command set implemented by the user interface system and including a command for a user to set a cluster mode where the cluster mode includes at least one of the plurality of failover modes, wherein *each failover mode configures the partner storage system with a world wide node name and a world wide port name from the selected storage system to allow the partner storage system to assume an identity of the selected storage system.*

By way of background, Blumenau discloses a storage controller with at least one physical port and a plurality of virtual ports. A virtual switch routes storage requests from the physical port to the virtual ports. The storage controller includes a graphical user interface (GUI) that includes a grid of logical volumes to storage adapter ports. Additionally, at each intersection on the grid, the target/LUNs assigned to provide the administrator with a view of the mappings of LUNs to logical storage volumes and storage adapters. Furthermore, an administrator can use “mount” and “unmount” commands for mounting and unmounting storage volumes to storage ports.

VVR discloses a replication system for a cluster system, where the primary storage system and the secondary storage system are located in two separate geographic areas. Both the primary storage system and the secondary storage system are made up of a

two node cluster site. Data is replicated on the secondary storage system using synchronous or asynchronous replication modes. Upon a partial failure of a primary storage system, the second node in the cluster system takes over as the primary storage system. Upon a full failure of the primary storage system, the secondary storage system takes over. If a power outage occurs at the primary storage system, then the secondary storage system can take over the primary storage system.

Applicant respectfully urges that Blumenau and VVR, taken alone or in combination do not teach or suggest Applicant's claimed novel *each failover mode configures the partner storage system with a world wide node name and a world wide port name from the selected storage system to allow the partner storage system to assume an identity of the selected storage system*. In further detail, in Applicant's claimed invention, a user interface is used to simplify management of a clustered storage system. The user interface defines a plurality of failover modes for operating the cluster in cluster mode. The command set permits the administrator to set the cluster failover mode as STANDBY, PARTNER, TAKEOVER, DUAL_FABRIC, or MIXED. Each failover mode, allows a port on the partner storage system to assume the world wide node name and world wide port name of the selected (failed) storage system. The port on the partner storage system assumes the identity of the selected (failed) storage system to receive requests directed to the selected (failed) storage system. Additionally, the partner storage system can be configured to receive requests directed to the partner storage system and the selected (failed) storage system.

In contrast, Blumenau discloses a world wide name (WWN) port name, but is silent in regard to a world wide node name. A world wide node name uniquely identifies the entire node (server). (pg 17, line 13-17). There is no disclosure in Blumenau nor VVR of each failover mode assuming a ***world wide node name and a world wide port name from the selected storage system***, as claimed by Applicant.

Accordingly, Applicant respectfully urges that Blumenau and VVR, taken alone or in combination, are legally insufficient to make obvious the presently claimed invention under 35 U.S.C. § 103 because of the absence of the Applicant's claimed novel ***each failover mode configures the partner storage system with a world wide node name and a world wide port name from the selected storage system to allow the partner storage system to assume an identity of the selected storage system.***

At paragraph 7 of the Office Action, claims 5, 23, and 37 were rejected under 35 U.S.C. § 103 as being unpatentable over Blumenau, in view of Clark, "IP SANs: A Guide to iSCSI, iFCP, and FCIP Protocols for Storage Area Networks" Published Nov. 26, 2001, hereinafter Clark.

Applicant respectfully notes that claims 5, 23, and 37 are dependent claims that depend from independent claims believed to be in condition for allowance. Accordingly, claims 5, 23, and 37 are believed to be in condition for allowance.

New Claims

The new claims 56-58 are believed allowable for the reasons set forth above. For example, representative claim 56 comprises in part:

a first server configured with a first port to send and receive messages from one or more clients and the first server connected to a first set of storage devices and a second set of storage devices, wherein the first server is configured to own the first set of storage devices and the first port is configured with a world wide port name and the first server is configured with a world wide node name;

...
a command set implemented by the interface system and including a command for a user to set a cluster mode where the cluster mode includes at least one of the plurality of failover modes, *wherein each failover mode configures the second port on the second server with the world wide node name and the world wide port name of the first server to allow the second port of the second server to assume an identity of the first server.*

There is no teaching or suggestion in Blumenau and VVR of *each failover mode configures the second port on the second server with the world wide node name and the world wide port name of the first server to allow the second port of the second server to assume an identity of the first server*, as claimed by Applicant.

All independent claims are believed to be in condition for allowance.

All dependent claims are dependent from independent claims which are believed to be in condition for allowance. Accordingly, all dependent claims are believed to be in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account
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Respectfully submitted,

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